

CLAIMS

1. (Amended) A telephone call charge settlement system having a center apparatus, a terminal apparatus that is network-connected to the center apparatus via a communication line, and computer systems that are network-connected to the center apparatus via communication lines and managed by a plurality of communication companies, characterized in:

that the terminal apparatus comprises:

a display for displaying a picture for selection of a prepaid sheet relating to each communication company;

input means for selection of a particular communication company and a necessary amount of money; and

means for sending the center apparatus a communication company and a necessary amount of money that have been selected by a user;

that the center apparatus comprises:

cipher information storing means for accumulating pieces of cipher information each being a string of a prescribed number of characters including at least an access number to be used for making a connection to the computer system of each communication company;

means for generating, when paid amount of money information indicating an amount of money paid by the user is sent from the terminal apparatus or another terminal apparatus, valuable cipher information in which the amount of money is

correlated with cipher information of the communication company selected by the user on condition that the necessary amount of money coincides with the paid amount of money; and

means for sending the valuable cipher information to the terminal apparatus and the computer system of the communication company selected by the user; and

that the computer system of the communication company comprises:

valuable cipher information storing means for storing valuable cipher information that is sent from the center apparatus;

charge storing means for accumulating a charge system of the communication company itself;

balance checking means for checking, when valuable cipher information and a termination-side telephone number are input from a calling-side terminal and a line connection to the calling-side terminal is established via a public line network, a balance of an amount of money that is correlated with the valuable cipher information by searching the valuable cipher information storing means using the valuable cipher information as a key;

line connection means for establishing a connection between the calling-side terminal and the termination-side terminal if the balance is greater than or equal to a prescribed amount;

call allowable time calculating means for calculating a call allowable time by applying the balance to the charge system;

call time measuring means for measuring a time of a call between the calling-side terminal and the termination-side terminal;

line disconnection means for disconnecting a speech channel between the calling-side terminal and the termination-side terminal at a time point when the call allowable time has elapsed;

call charge calculating means for calculating a call charge by applying the call time to the charge system; and

balance reducing means for subtracting the call charge from the balance.

2. (Amended) A telephone call charge settlement system having a center apparatus, a terminal apparatus that is network-connected to the center apparatus via a communication line, and computer systems that are network-connected to the center apparatus via communication lines and managed by a plurality of communication companies, characterized in:

that the terminal apparatus comprises:

a display for displaying a picture for selection of a prepaid sheet relating to each communication company;

input means for selection of a particular communication company and a necessary amount of money; and

means for sending the center apparatus a communication

company and a necessary amount of money that have been selected by a user;

that the center apparatus comprises:

cipher information storing means for accumulating pieces of cipher information each being a string of a prescribed number of characters including at least an access number to be used for making a connection to the computer system of each communication company;

means for generating, when paid amount of money information indicating an amount of money paid by the user is sent from the terminal apparatus or another terminal apparatus, valuable cipher information in which the amount of money is correlated with cipher information of the communication company selected by the user on condition that the necessary amount of money coincides with the paid amount of money; and

means for sending the valuable cipher information to the terminal apparatus and the computer system of the communication company selected by the user; and

that the computer system of the communication company comprises:

valuable cipher information storing means for storing valuable cipher information that is sent from the center apparatus;

charge storing means for accumulating a charge system of the communication company itself;

balance checking means for checking, when valuable cipher information and a termination-side telephone number are input from a calling-side terminal and a line connection to the calling-side terminal is established via a public line network, a balance of an amount of money that is correlated with the valuable cipher information by searching the valuable cipher information storing means using the valuable cipher information as a key;

line connection means for establishing a connection between the calling-side terminal and the termination-side terminal if the balance is greater than or equal to a prescribed amount;

call time measuring means for measuring a time of a call between the calling-side terminal and the termination-side terminal;

balance reducing means for calculating a call charge every prescribed unit time by referring to the charge system and reducing the balance each time; and

line disconnection means for disconnecting a speech channel between the calling-side terminal and the termination-side terminal at a time point when the balance has become smaller than or equal to a prescribed amount.

3. (Amended) A telephone call charge settlement system having a center apparatus, a terminal apparatus that is network-connected to the center apparatus via a communication

line, computer systems that are network-connected to the center apparatus via communication lines and managed by a plurality of communication companies, and a computer system that is network-connected to the center apparatus via a communication line and managed by a credit card company, characterized in:

that the terminal apparatus comprises:

a display for displaying a picture for selection of a prepaid sheet relating to each communication company;

input means for selection of a particular communication company and a necessary amount of money; and

means for sending the center apparatus a communication company and a necessary amount of money that have been selected by a user;

that the center apparatus comprises:

cipher information storing means for accumulating pieces of cipher information each being a string of a prescribed number of characters including at least an access number to be used for making a connection to the computer system of each communication company;

card settlement processing means for sending, when information relating to a credit card of the user is sent from the terminal apparatus or another terminal apparatus, the credit card information and the necessary amount of money to the computer system of the credit card company to request credit card settlement, and for checking whether the credit card

settlement has completed;

means for generating valuable cipher information in which the amount of money is correlated with cipher information of the communication company selected by the user when the credit card settlement has completed; and

means for sending the valuable cipher information to the terminal apparatus and the computer system of the communication company selected by the user; and

that the computer system of the communication company comprises:

valuable cipher information storing means for storing valuable cipher information that is sent from the center apparatus;

charge storing means for accumulating a charge system of the communication company itself;

balance checking means for checking, when valuable cipher information and a termination-side telephone number are input from a calling-side terminal and a line connection to the calling-side terminal is established via a public line network, a balance of an amount of money that is correlated with the valuable cipher information by searching the valuable cipher information storing means using the valuable cipher information as a key;

line connection means for establishing a connection between the calling-side terminal and the termination-side

terminal if the balance is greater than or equal to a prescribed amount;

call allowable time calculating means for calculating a call allowable time by applying the balance to the charge system;

call time measuring means for measuring a time of a call between the calling-side terminal and the termination-side terminal;

line disconnection means for disconnecting a speech channel between the calling-side terminal and the termination-side terminal at a time point when the call allowable time has elapsed;

call charge calculating means for calculating a call charge by applying the call time to the charge system; and

balance reducing means for subtracting the call charge from the balance.

4. (Amended) A telephone call charge settlement system having a center apparatus, a terminal apparatus that is network-connected to the center apparatus via a communication line, computer systems that are network-connected to the center apparatus via communication lines and managed by a plurality of communication companies, and a computer system that is network-connected to the center apparatus via a communication line and managed by a credit card company, characterized in:

that the terminal apparatus comprises:

a display for displaying a picture for selection of a



prepaid sheet relating to each communication company;

input means for selection of a particular communication company and a necessary amount of money; and

means for sending the center apparatus a communication company and a necessary amount of money that have been selected by a user;

that the center apparatus comprises:

cipher information storing means for accumulating pieces of cipher information each being a string of a prescribed number of characters including at least an access number to be used for making a connection to an exchange of each communication company;

card settlement processing means for sending, when information relating to a credit card of the user is sent from the terminal apparatus or another terminal apparatus, the credit card information and the necessary amount of money to the computer system of the credit card company to request credit card settlement, and for checking whether the credit card settlement has completed;

means for generating valuable cipher information in which the amount of money is correlated with cipher information of the communication company selected by the user when the credit card settlement has completed; and

means for sending the valuable cipher information to the terminal apparatus and the computer system of the communication

company selected by the user; and

that the computer system of the communication company comprises:

valuable cipher information storing means for storing valuable cipher information that is sent from the center apparatus;

charge storing means for accumulating a charge system of the communication company itself;

balance checking means for checking, when valuable cipher information and a termination-side telephone number are input from a calling-side terminal and a line connection to the calling-side terminal is established via a public line network, a balance of an amount of money that is correlated with the valuable cipher information by searching the valuable cipher information storing means using the valuable cipher information as a key;

line connection means for establishing a connection between the calling-side terminal and the termination-side terminal if the balance is greater than or equal to a prescribed amount;

call time measuring means for measuring a time of a call between the calling-side terminal and the termination-side terminal;

balance reducing means for calculating a call charge every prescribed unit time by referring to the charge system and

reducing the balance each time; and

line disconnection means for disconnecting a speech channel between the calling-side terminal and the termination-side terminal at a time point when the balance has become smaller than or equal to a prescribed amount.